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# Synthesis, structure, and biological activity of dicarboxylate phosphabetaines

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## Abstract

© 2016 Taylor & Francis Group, LLC.New stable dicarboxylate phosphabetaines were synthesized by the phosphorylation of a series of unsaturated carboxylic acids. Interaction of 3-(diphenylphosphonio)propionic acid with unsaturated monocarboxylic acids leads to the formation of stable dicarboxylate phosphabetaines 1–7. The structure of the isolated compounds was determined by IR and NMR spectroscopy, X-ray single crystal diffraction studies, and elemental analysis. Their thermal stability was studied by simultaneous thermogravimetry and differential scanning calorimetry. All of the synthesized compoundswere tested for their antibacterial and anti-Candida activity.

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## Keywords

antimicrobial activity, Dicarboxylate phosphabetaines, organophosphorus compounds